

# THE DIAMOND DRILL.

C. M. ATKINSON, EDITOR AND PROPRIETOR.

A Weekly Journal Devoted to the Various Interests of Iron County.

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VOLUME I.

CRYSTAL FALLS, IRON COUNTY, MICHIGAN, SATURDAY, OCTOBER 29, 1887.

NUMBER 41.

## STOP

Paying such exorbitant prices for  
**Dry Goods, Cloaks, Clothing, etc**

Don't you know that we can give you the highest quality of goods at lower prices than you are paying elsewhere? We have studied to please and can please. If you want some real bargains come

## RIGHT

Now, and look over our superb display of goods for Fall and Winter wear. We have the latest styles, the best stock to select from, and can give what we promise, a fair and square deal for everybody.

## HERE!

Comes the rub. If you trade with us you need not feel scared that you are going to be beat. A blind man will get the same amount of satisfaction as one with clear eye-sight. Don't have any fears, come and see us at once.

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Agent for the best European Steamship Lines. Drafts sold to any part of Europe.

### DIAMOND DRILL CORES.

Put up your storm doors.  
Monte Cristo Monday night.  
The social season has opened.  
Old papers for sale at this office.  
The autumn leaves have left, mostly.  
You hear the falling rain but not the snow.  
Things that cannot be killed has a very good right to live.  
The walls of the county building have been banked up for the winter.  
Funny some of the amusement lovers don't organize a progressive whist club.  
The first sleigh bells of the season jingled through our streets Sunday evening.  
The weather is no longer warm, and the coolness of old winter has made its appearance.  
Begin to look like winter was the greeting one received from every corner Monday morning.  
A man considerably the worse off for drink occupied a berth on the railway track the other day.  
A resident kindly informed the writer that "quince jelly was a delicious thing to eat on pan-cakes."  
Constant was the order of the evening Tuesday night. The young people enjoyed themselves immensely.  
School boys are in all their glory now. Black eyes and a broken pane of glass will be the result of many a snow ball.  
If there is anything that the rising generation of this place keeps in order and know where to find at a moments notice it's their sleds.  
Alden Benedict is one of the most promising young actors on the stage.—Chicago Herald. See him Monday night at the opera house.  
Ladies, don't forget to examine the elegant line of seal plush garments, wraps, and newmarkets at "Max" the clothier's before purchasing elsewhere.  
W. L. Golden, after having finished his logging contract her moved with his crew and outfit to Iron River Friday where he will operate this winter.  
Mr. Alden Benedict is the only successful rival of James O'Neill in "Monte Cristo."

to."—New York Times. He will appear in Doucet's opera house Monday evening.

One of our young men asks: "Where are the bright girls of the past?" Ta, ta, young man, ta-ta. Some of them are administering copious doses of paragonie to the bright girls of the future.

Some of the society young ladies met at the residence of Mrs. McCourt Tuesday evening and organized a Chauteauqua reading circle. All those who wish to join this circle are requested to meet at Miss Mattie Hollister's Tuesday evening at seven.

The Alden Benedict "Monte Cristo" company had a \$500 house at Bay City last night. Mr. Benedict will put up a forfeit of \$1,000 Monday when he reaches this city, that he will guarantee as good an entertainment as ever given there.—Saginaw Sunday Herald.

First quarterly service of the M. E. church will be held Sunday November 3. After morning service Sacrament of the Lord's supper will be administered. Thursday evening November 10, the Presiding Elder, A. Bartlett, of Marquette will hold quarterly conference.

Officer Prince was put under the painful necessity of putting Paul Wiegels in the cooler Tuesday, as he had been indulging in a little too much "topsy turvey" in celebrating the event of the arrival of his wife who came over from "Vatherland" Monday. Dave had quite a struggle with his man but he got there just the same.

Society gossips of Florence now have something over which to wag their tongues, in the shape of an elopement, which took place a few days ago. The principle parties are Anthony Charlebois, a lumberman, and Miss Kate Genery, of Indian parentage. The pair had participated in the affairs of courtship for a period of only about three weeks, when a flight was agreed to after the guardian of the young lady refused to allow the suitor to pay further attention to her, which resulted as above.

### For Sale.

A Uren has a quantity of dry hard wood, four foot, which he will deliver at \$3.00 per cord. 124.

## MINING POINTS.

A VERY INTERESTING ARTICLE ON MINING.

Points Relating to the History of Iron—Iron one of the Most Useful Ores in Existence—The Formation of Ore Veins—Points of Local Interest.

The following quite lengthy and very able article is from the pen of Mr. Ad. Toellner, a Milwaukee gentleman: "Of all full metals iron has by far the widest distribution on the earth, and the spectroscopic tells us that the same metals also exist in large quantities in other planets and stars. Meteoroids which have found their way to this earth have been found to contain pure iron, which is evidence that the metal is universal. The whole organic and inorganic world proves that iron exists in some form in nearly every particle of its structure. The red color in our blood

IS MADE BY IRON,

the green in a leaf is made by iron, and all primary and secondary rocks contain iron in more or less quantities. As a portion of the air we breathe is in connection with carbonic acid, and as a part of our drinkwater it serves as a feeder for plants and animals. Certain spring waters abound in iron, and these waters are in many cases used as health-restorers to invigorate the system. Dissolved in water, it generally has the form of iron oxidal, seldom as iron oxide, and as such it comes to daylight. But as it has a very interesting affinity to oxide it soon associates with the oxide of the atmosphere, and settles in rusty yellow flecks in the form of iron oxidal hydrate in calm spots. If these calm spots

HAVE A ROUGH SURFACE,

the secretion forms so much the quicker. Iron oxide thus treated becomes hard in time, and after a while it undergoes crystallization, in which form it is the well known swamp or bog iron ore. The forming of bog iron is at present visible in many places all over the world. The writer saw large tracts of land in Northern Germany between twenty and twenty-five years of age, which has been covered by a layer of bog iron. The bog iron had been all used up in an iron furnace. Today a new layer has been formed from two to four feet in thickness. The surroundings are wet, swampy, and very springy. As said before, iron is a part of the

PRIMARY ROCKS,

especially the granite from which it was separated, either by corroding of the rock or by a decomposition, or by sulphuric acid waters or vapors, which compelled it partly to leave its associate carbonic acid and come to the surface with spring waters, either as sulphuric or carbonic oxide iron. It is my hypothesis, studied in many different parts of the Northern globe, that the sediments of iron-bearing spring waters are the origin of most iron ore beds or iron ore veins. Since the Plutonic age and during the metamorphic age immense ore beds have been formed on top of slate beds, covered by trap and similar other metamorphic rocks, and as

EXPERIENCE INDICATES,

these are the deposits where iron ore is found. As good examples of this class of formations of iron veins, those in the Upper Peninsula of Michigan, Northern Wisconsin and North-eastern Minnesota are given. The form of swamp iron is changed in these localities into the formation of red iron stone or hematite. The soft hematite has mostly a yellow, dark brown or dark red color, and is generally amorphous in its construction, and seldom contains a crystalline consistence, except in some crevices, which will be hereafter demonstrated. When this ore is mined it looks similar to that of pumice dirt and clay mixed together.

IN ITS ORIGINAL POSITION

in the mine an observer will not see it. It was deposited in regular strata like sand and lime rocks, thus proving the origin of its birth to be a water-made product. All opened mines show a declination of the ore veins from north to south at the angle of sixty to eighty degrees. The thickness of the veins vary between thirty and two hundred and sixty feet for a distance in one place of more than one hundred miles from north-west to south-east, from which many branches or side ranges are run off. The footing of the iron beds are generally slates and the covering or hanging trapp rocks. According to my theory the process by which the

HEMATITE ORE BEDS

were formed is as follows: The old met-

What is the difference between a man walking up Chestnut street eating walnuts and the man walking up Walnut street eating chestnuts.



Give a top, but we all know the difference between "The Fair" and the parting words of a boy leaving home. At

**"THE FAIR,"**

you can buy well, and the boy receives for good-bye fare-well.

**Chestnuts,**

It might be chestnuts but nevertheless remains true that you can buy strictly first-class goods for a good deal less money at

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amorphous slates are made by the aid of water (rains or tides), which dissolved the aluminum of the granite, syenite and other Plutonic rocks, containing at that time enormous quantities of carbonic acid, and washed the particles in the form of clay to the lower or valley portions of the country. Especially on the shores of the ancient rivers and oceans these clay sediments settled, thus forming horizontal beds. The internal heat of the earth after a while hardened these layers, and the shrinkage of their crest and volcanic and other eruptions made later or at the same time finally turned or twisted them

INTO THE SHAPE IN WHICH

they are found in this age. The iron ore, as well as the rocks or stratum which surrounded it, all went together. But as the main moving is done by shrinkage of the earth's crust, following the cooling process of the earth's interior in a very regular and even manner, we find that during the Huronian or metamorphic ages, the rock layers were lifted up even, without much confusion, and so we find the iron in all our northern ranges. This is the case in the Gogebie, Penoque, Menominee, Marquette, Vermillion, and other known ranges, more or less. It is very

PROBABLE THAT THE IRON

ore which has an elevated position in the ranges lay in many localities between the ranges more or less horizontal. Several deep holes in the right places would prove the truth of this theory. Any hole bored would touch the granite, which can be found anywhere at no great depth. A variation of the soft is the hard hematite. It appears under the same conditions as its cousin, but is of a sharp, fire, strata nature or crystalline tendency, and the layers are not so easily traceable as is the soft hematite. The best of this ore resembles pure iron. In brightness it is similar to a polished stone. The

WIDTH OF THE VEINS

is about the same as the soft, but more irregular in widening and shrinking. I believe the hard hematites are produced from soft hematites by being at some previous time in a vacuum under im-

Concluded on fifth page.

### RANGE ROUND UP.

Typhoid fever has found its way to Escanaba, and new cases are reported every day.

The Industrial World, of Iron Mountain, calls the range, of that city, a mud scow, wonder if the range has been throwing mud at its neighbors.

The first "toot" of the great "iron horse" will be heard in Manistique within a couple of weeks, and the citizens are so over loaded with gladness that they threaten to paint the town red.

One of Norway's saloonists was arrested the other day on the charge of violating the new liquor law. He waived examination and gave bonds to appear at the next session of the Circuit court.

The summer resort season at Spread Eagle has closed. It is estimated that fully 1,500 people visited the place during the past season. A number of new boats will be purchased before next season's opening.

It is stated that the Chicago and North-Western Railway Company has decided that in building bridges hereafter no more soft sand stone will be used, as it softens with the time when exposed to the elements. Nothing but granite will hereafter be used in bridges.

On Thursday morning of last week, one of the most disastrous fires that ever visited Marinette swooped down upon that city burning nearly half of the business houses. The origin of the fire is unknown. The loss is footed up at \$215,000, with only a partial insurance.

### Excitement in Texas.

Great excitement has been caused in the vicinity of Paris, Tex., by the remarkable recovery of Mr. J. E. Corley, who was so helpless he could not turn in bed, or raise his head; every body said he was dying of consumption. A trial bottle of Dr. King's new discovery was sent him. Finding relief, he bought a large bottle and a box of Dr. King's new life pills; by the time he had taken two boxes of pills and two bottles of the discovery, he was well and had gained in flesh thirty-six pounds. Trial bottles of this great discovery free at J. E. Bower's. Large bottles \$1.

Four per cent. Discount off to Cash Buyers.